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The Child with Autistic Spectrum Disorder — Current Perspective

Abdul Halim Abdul Jalil*

KPJ Ampang Puteri Specialist Hospital, Selangor, Malaysia

***Corresponding Author:** Abdul Halim Abdul Jalil, Consultant Paediatrician, KPJ Ampang Puteri Specialist Hospital, Selangor, Malaysia.

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One in 1000 children between the ages of 3 and 9 was found to have autism from an epidemiological study conducted in Malaysia in 1981 as part of a collaborative international pilot study [1]. Currently, autistic spectrum disorder (ASD] is one of the top five developmental impairments in children under the age of 5 in 195 nations and territories [2]. The prevalence is undoubtedly considerably much higher now than it was in the past. The three core criteria of autistic spectrum disorder (ASD) are impairment in social interaction, impairment in communication and restrictive repetitive and stereotypic patterns of behavior, interests and activities. It is feasible to diagnose childhood autism as early as under 2 years of age with a suitable screening tool, such as functional developmental evaluation questionnaires, followed by a neurodevelopmental assessment by a pediatrican in suspected cases. All too often the diagnosis is made after the age of 5 years. Hence, valuable time is lost in providing an appropriate early interventional holistic developmental therapy program for every child. There have been studies in structural MRI, functional MRI and brain chemistry using MR spectroscopy for early diagnosis but these are still inconclusive [3].

There is currently no consensus regarding the pathogenesis of ASO. The popular belief that autism is primarily inherited is not supported by the available research. It seems that autism is not primarily caused by genes. It has to do with how the genes are expressed, which is affected by environmental influences acting above and beyond the gene level (via epigenetic mechanisms). This is currently a popular field of study. The pathogenesis of autism thus appears to involve metabolic abnormalities, prenatal, perinatal, or postnatal stressors, as well as brain inflammation as potential initiating factors. Therefore, it seems that the ASD phenotype is the final common pathway (or expression) caused by the interaction of many genes with these various environmental elements serving as triggers (medications, immunizations, food, air, toxins, heavy metals, etc.).

The core deficits in childhood autism have been very poorly addressed by drug therapy in traditional treatment. Applied Behavioral therapy has been considered to be a gold standard evidence-based intervention fo? ASO [4]. The biological approach, which includes diet and nutrient supplementation to treat "leaky gut", detoxification, treating bacterial and fungal intestinal overgrowth, enzymes, etc., is being. Widely reported by doctors as having a notable impact on the symptoms of autism [5]. To prove this, more research is required.

In the field of systems biology, the role of immunological dysfunction, mitochondrial dysfunction, microtear at the junctional intestinal epithelium (the leaky gut) and intestinal microbiota in impairing subcellular processes thereby contributing to the ASD phenotype has been gaining prominence recently [6]. Practitioners have recommended various biomolecular therapies to treat these dysfunctions in the hopes of eradicating or lessening the core symptoms of ASD.

The outlook for a child with classical autism has changed as a result of breakthroughs in scientific understanding of cellular and molecular biology, epigenetics, and neurodevelopmental training methods. The paediatrician who has been treating a child since early infancy is in the best position to spot aberrant development, arrange diagnostic testing, and, if necessary, design a treatment

plan. It is crucial to correct any imbalances in the child's internal bodily environment. On an individual basis, an eclectic therapeutic approach that incorporates the best elements of all bio-medical and psychological systems should be offered.

It is crucial to appreciate the management issue from the parents' point of view in order to provide effective parenting approach for controlling the child at home. Positive therapeutic working relationships between the parents, the medical providers, and other providers are essential for effective therapy and tracking of progress. If the child continues to regress despite the intensive intervention program provided, the protocol of live cell therapy employing fetal precursor stem cells should be considered. This is a customized, integrative therapy plan designed to improve the pathophysiology of the afflicted systems and revitalize cellular functions [7].

The rejuvenating benefits of live cell therapy usually result in an improvement in attention span, a decrease in hyperactivity and aggressive behavior, allowing for more effective developmental therapy and educational training programs. The child may show developmental leaps with this protocol, but it is crucial to understand that regression may occur as a result of intervening physical, emotional, social, and even psychospiritual stimuli, and these need to be addressed appropriately.

Patients with autism spectrum disorders who are academically functioning at a very high level need the appropriate training environment and emotional support from a young age. This will aid them in navigating the social environment, which can be perplexing to them and lead to emotional instability and a loss of self-worth. These children have the capacity to make important contributions to society. Many well-known people now acknowledge having some of the characteristics found in many famous historical personalities with ASD (more parhcularly, Asperger's syndrome). They have significantly influenced society with their amazing brilliance and inventiveness.

Every ASD child is different. The parent, medical professionals, and trainers must work closely together to produce the best treatment results and provide the child the best chance to grow into an independent adult who can contribute to society.

Bibliography

1. Kassim MS and Halim AJ. "Survey for identification of severe childhood disability in Malaysia". Proceedings of the 17'h International Congress of Pediatrics (1986).

2. Theo Vos., *et al*. "Global, Regional, and National Incidence, Prevalence, and Years Lived with Disability for 310 Diseases and Injuries, 1990-201S: A Systematic Analysis for the Global Burden of Disease Study 2015". *The Lancet* 388.10053 (2016): 1545-1602.

3. Ecker C., *et al*. "Neuroimaging in autism spectrum disorder: Brain structure and function across the lifespan". *The Lancet Neurology* 14.11 (2015): 1121-1134.

4. Kristen R Choi., *et al*. "Patient Outcomes After Applied Behavior Analysis for Autism Spectrum Disorder". *Journal of Developmental and Behavioral Pediatrics* 43.1 (2022): 9-16.

5. Abdul Halim Abdul Jalil. "Hope for Untreatable medical Disorders. Live cell therapy explained". Troubador Publishing Ltd. UK.(2017)

6. DA Rossignol and RE Frye. "Mitochondrial dysfunction in autism spectrum disorder: A systematic review and meta-analysis". *Molecular Psychiatry* 17 (2012): 290-314.

7. Abdul Halim Abdul Jalil and Mohamed Lokman Md Isa. "Live cell therapy: Past, present and future". *Journal of Reproductive Biotechnology and Fertility* 11 (2022).